

ADCYA rabbit pAb

Catalog No: YT6551

Reactivity: Human; Mouse; Rat

Applications: WB

Target: ADCYA

Fields: >>Purine metabolism;>>Metabolic pathways;>>cAMP signaling

pathway;>>Apelin signaling pathway;>>Circadian

entrainment;>>Thermogenesis;>>Growth hormone synthesis, secretion and

action

Q96PN6

Q8C0T9

Gene Name: ADCY10 SAC

Protein Name: ADCYA

Human Gene Id: 55811

Human Swiss Prot

No:

Mouse Gene ld: 271639

Mouse Swiss Prot

No:

Rat Gene ld: 59320

Rat Swiss Prot No: Q9Z286

Immunogen: Synthesized peptide derived from human ADCYA AA range: 368-418

Specificity: This antibody detects endogenous levels of ADCYA at Human/Mouse/Rat

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1 ?500-2000

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 177kD

Background: The protein encoded by this gene belongs to a distinct class of adenylyl cyclases

that is soluble and insensitive to G protein or forskolin regulation. Activity of this protein is regulated by bicarbonate. Variation at this gene has been observed in patients with absorptive hypercalciuria. Alternatively spliced transcript variants encoding different isoforms have been observed. There is a pseudogene of this

gene on chromosome 6. [provided by RefSeq, Jul 2014],

Function: catalytic activity:ATP = 3',5'-cyclic AMP + diphosphate.,cofactor:Binds 2

magnesium ions per subunit., disease: Genetic variations in ADCY10 are associated with absorptive hypercalciuria type 2 (HCA2) [MIM:143870]. Absorptive hypercalciuria (AH) is a common cause of calcium oxalate

nephrolithiasis. Clinically, AH is characterized by intestinal hyperabsorption of calcium in the presence of normal serum calcium and immunoreactive PTH (iPTH). It is often accompanied by low bone mineral density (BMD), particularly of the lumbar spine. About 50% of patients with AH present with a family history of calcium oxalate nephrolithiasis and hypercalciuria.,enzyme regulation:Activated by manganese or magnesium ions. In the presence of magnesium ions, the enzyme is activated by bicarbonate while in the presence of manganese ions, the

enzyme is inhibited by bicarbonate. In the absence of magnesium and bic

Subcellular Location:

Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cytoplasm, cytoskeleton . Cytoplasm, perinuclear region . Nucleus . Cell projection, cilium . Cytoplasm . Mitochondrion . Distributed to subcellular compartments containing

cAMP targets. Found as a plasma membrane-associated protein, protein concentrated in the perinuclear region and protein colocalized with actin or

tubulin...

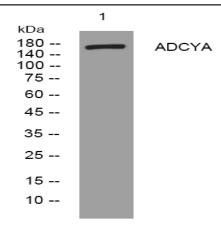
Expression : Detected in airway epithelial cells and testis (at protein level)

(PubMed:17591988). Weakly expressed in multiple tissues. Expressed in brain, heart, kidney, liver, lung, pancreas, peripheral blood leukocytes, placenta,

skeletal muscle, stomach, thymus, airway epithelial cells, duodenum, jejunum and

ileum. Very low level of expression in bone.

Products Images



Western blot analysis of lysates from KB cells, primary antibody was diluted at 1:1000, 4° over night